PEDIATRIC

BASIC LIFE SUPPORT GUIDELINE

BURNS

1. Stop the burning process.
   a. If a dry chemical is involved, brush it off, then flush with copious amounts of water.
   b. If a caustic liquid is involved, flush with copious amounts of water.
   c. Be prepared to treat hypothermia, which may arise secondary to these interventions.
   d. For chemical burns with eye involvement, irrigate with normal saline or sterile water (see *Eye Irrigation Guideline* for further information).
   e. For specific individual chemical treatment protocols contact your local Hazmat resource. Poison Control can be contacted at-1-800-860-0620 or on a designated EMS frequency to obtain additional information.
2. Establish patient responsiveness. If cervical spine trauma is suspected, manually stabilize the spine.
3. Remove the patient's clothing and jewelry in any affected area.
4. Assess the patient's airway for patency, protective reflexes and the possible need for advanced airway management. Special attention should be taken to assess patients exposed to fire in an enclosed space. Signs of airway burn injury include:
   a. Abnormal airway sounds
   b. Abnormal posturing
   c. Singed nasal hairs
   d. Carbonaceous material around mouth/nares or in sputum
5. Open the airway using head tilt/chin lift if no spinal trauma is suspected, or modified jaw thrust if spinal trauma is suspected.
6. Suction as necessary.
7. Consider placing an oropharyngeal or nasopharyngeal airway adjunct if the airway cannot be maintained with positioning and the patient is unconscious.
8. Assess breathing.
   a. If breathing is adequate, place the child in a position of comfort and administer high-flow 100% concentration oxygen as necessary. Use a nonrebreather mask for potential inhalation injury or any serious thermal burn

b. If breathing is inadequate, assist ventilation using a bag-valve-mask device with high-flow, 100% concentration oxygen. If abdominal distention arises, consider placing a nasogastric tube to decompress the stomach.

9. Assess circulation and perfusion.

10. Assess mental status.

11. If spinal trauma is suspected, continue manual stabilization, place a rigid cervical collar, and immobilize the patient on a long backboard or similar device.

12. Expose the child only as necessary to perform further assessments. Maintain the child's body temperature throughout the examination.

13. Use the "rule of palm" or the attached chart to estimate percentage of body surface area injured. (Rule of palm: child's hand represents approximately 1% of their body surface area)

14. Estimate depth of burn as superficial partial thickness or full thickness.

15. Apply a burn sheet or dry sterile dressings to burned areas. To prevent hypothermia, avoid moist or cool dressings and do not leave wounds or skin exposed.

16. Initiate transport. Perform focused history and detailed physical examination en route to the hospital if patient status and management of resources permit.

17. Pain management may be indicated, and should be initiated by arriving ALS Providers.

18. Reassess the patient frequently.

19. Contact medical control for additional instructions.

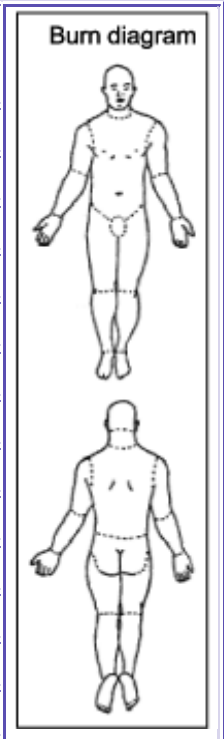
CHARACTERISTICS OF BURNS		
First Degree -- Superficial	**Second Degree -- Partial thickness**	**Third Degree -- Full thickness**
Dry, red, slight swelling. Very painful and involves only the epidermis or most superficial layer.	Blistered mottled pink or red, may be deep red - tan, moist. Very painful and sensitive to air and involves the epidermis and the dermis.	May still have blistered areas, leathery surface charred black, white or deep red. Usually painless and involves the epidermis, dermis and the cells responsible for regeneration. May involve both muscle and bone

PERCENT OF BODY SURFACE AREA INJURED

To estimate body surface area use the chart on the following page

Chart for Estimating Area of Burns

Area	Birth to1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 years	Adult	2nd*	3rd*	TBSA
Head	19	17	13	11	9	7			
Neck	2	2	2	2	2	2			
Anterior trunk	13	13	13	13	13	13			
Posterior trunk	13	13	13	13	13	13			
Right buttock	2.5	2.5	2.5	2.5	2.5	2.5			
Left buttock	2.5	2.5	2.5	2.5	2.5	2.5			
Genitalia	1	1	1	1	1	1			
Right upper arm	4	4	4	4	4	4			
Left upper arm	4	4	4	4	4	4			
Right lower arm	3	3	3	3	3	3			
Left lower arm	3	3	3	3	3	3			
Right hand	2.5	2.5	2.5	2.5	2.5	2.5			
Left hand	2.5	2.5	2.5	2.5	2.5	2.5			
Right thigh	5.5	6.5	8	8.5	9	9.5			
Left thigh	5.5	6.5	8	8.5	9	9.5			
Right leg	5	5	5.5	6	6.5	7			
Left leg	5	5	5.5	6	6.5	7			
Right foot	3.5	3.5	3.5	3.5	3.5	3.5			
Left foot	3.5	3.5	3.5	3.5	3.5	3.5			
						Total:			



*--Second-degree burns are now more often designated as superficial partial-thickness or deep partial-thickness burns, and third-degree burns are designated as full-thickness burns.